SOLUTIA
Applied Chemistry, Creative Solutions

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June 9, 2003

Mr. Nabil S. Fayoumi
U. S. EPA - Region 5
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

Re: Sauget Area 2 Site – October 3, 2002 Unilateral Administrative Order (UAO)
Groundwater Operable Unit
 # 7 - June 2003 Monthly Report

Dear Mr. Fayoumi,

Attached is the June 2003 Monthly Report for the Sauget Area 2 Site October 3, 2002 Unilateral Administrative Order (UAO) - Groundwater Operable Unit. This submittal is in fulfillment of the monthly reporting requirements of the UAO, Section XII, paragraph 62, Progress Reports.

Sincerely,
Solutia Inc.

Steven D. Smith per Richard Williams

Steven D. Smith
Project Coordinator

cc: Bardo, Ken - U. S. EPA
Sandra Bron – IEPA
Mayor Frank Bergman - Cahokia
Village of Sauget – c/o P. H. Weis & Associates (Attn: Brian Nelson)
Mayor P. Sauget - Sauget, IL
Mike Coffey - U. S. Fish & Wildlife Service
Mike Henry - IDNR
Linda Tape – Husch & Eppenberger
Richard Williams – Solutia

Sauget Area 2 Site - Sauget, Illinois

October 3, 2002 UAO – Groundwater Operable Unit

Monthly Report

Date of Report: June 9, 2003
Period Covered: May 1, 2003 - May 31, 2003
Next Report Period: June 1, 2003 - June 30, 2003

Background

A Unilateral Administrative Order (UAO) was issued to a number of Potentially Responsible Parties, including Solutia, by the U. S. EPA on October 3, 2002, requiring installation of a 3,500 foot long, "U"-shaped, fully penetrating barrier wall to be installed between the downgradient boundary of Sauget Area 2 Site R and the Mississippi River. The wall will be placed to abate the release of impacted groundwater to the river. The UAO (U.S. EPA Docket No. V-W-'02-C-716) also requires installation of three partially penetrating groundwater recovery wells to be installed inside the "U"-shaped barrier wall. The recovery wells will be used to control groundwater moving to the wall. Extracted groundwater will be treated and ultimately discharged to the Mississippi River in compliance with all applicable or relevant and appropriate requirements. Groundwater quality, groundwater level, sediment and surface water monitoring will be used to ensure acceptable performance of the interim groundwater remedy. The work required by the UAO is an interim remedy for the Groundwater Operable Unit at the Sauget Area 2 Site. The remedy was specified in a Record of decision issued on September 30, 2002.

The UAO became effective on November 15, 2002. By letter dated November 15, 2002, Solutia informed the U. S. EPA of its intention to comply with the terms of the UAO.

Agency Actions / Communications

- The RD/RA Work Plan submitted on December 19, 2002 was conditionally approved in an e-mail message dated February 4, 2003. The conditional approval contained a number of questions and comments. Responses to these were provided at the same time that responses to comments on the Pre-Final design were submitted (see below).

- Comments were provided by U. S. EPA in an e-mail dated February 20, 2003 on the Pre-Final (95%) Remedial Design submitted on January 31, 2003. Responses to those comments were submitted on March 6, 2003.
- A second round of comments on the Pre-Final (95%) Remedial Design was received from USEPA in an e-mail message dated April 15, 2003. Responses to those comments were submitted on May 6, 2003.
- The groundwater extraction and disposal portion of the Pre-Final (95%) Remedial Design was approved for construction by the Agency in an e-mail message dated May 13, 2003.

Work Performed During the Reporting Period

- Access

  Access agreements have been finalized with the Village of Sauget, AmerenUE and with the Metropolitan East Sanitary District (MESD). Negotiations are ongoing with Eagle Marine Industries Inc. for access to Site Q along the southern edge of Site R. However, Eagle Marine is a respondent to the UAO and, as such; this access agreement is not subject to the reporting requirements of Article XVII, Clause 76, of the UAO. Consequently, the requirements of this Clause of the UAO have been satisfied. U. S. EPA was informed of this fact in an e-mail from Solutia's counsel, Husch and Eppenberger, dated May 15, 2003. An e-mail acknowledgement of this fact was received from the Agency (Mr. Tom Martin) on May 19, 2003.

- Barrier Wall Contractor Procurement

  Based on prequalification documents sent to 11 potential contractors, a short list of four contractors was compiled and these were invited to submit proposals to construct the project. The selected contractors presented their proposals during the week of March 10, 2003. Based on these proposals, it appears that a conventional soil-bentonite slurry wall may offer some advantages over a jet grouted wall. These advantages were discussed with EPA at a meeting on March 24, 2003 and Solutia was requested to prepare a report comparing the advantages and disadvantages of a slurry wall and a jet grouted wall. That report was submitted to the Agencies on April 24, 2003 and review comments were received from them on May 15, 2003. Responses to those comments are being prepared and will be submitted to the Agencies by June 12, 2003. The responses were originally due on June 5, 2003, but an extension of up to one week was granted by the Agency at a meeting held on June 4, 2003..

- Groundwater Pilot Test

  In order to obtain a representative sample of the extracted groundwater, one of the extraction wells was installed at the site. Beginning on May 19, 2003, this well was developed and the extracted groundwater was treated on site and discharged to the P-Chem treatment facility through a temporary pipeline. Following well development, a pilot test was conducted to ensure that enough representative

groundwater samples were obtained to adequately characterize the characteristics of the discharge stream from the groundwater extraction system and to validate the aquifer characteristics used in the design of the system.. Approximately 1,300,000 gallons of groundwater were extracted and treated on site over the period of May 19 to May 24, 2003, prior to discharge to the P-Chem facility. Samples collected from the test are currently being analyzed by an approved laboratory. A final discharge permit for this water was received from the American Bottoms Regional Wastewater Treatment Facility (ABRWTF) on May 16, 2003.

- Groundwater Discharge Permits

  The final discharge permit to allow discharge to ABRWTF of the groundwater extracted from full scale system has been received from IEPA. A meeting was held with IEPA on March 28, 2003 to discuss the possibility of discharging extracted groundwater from the full scale system to ABRWTF prior to issuance of a new NPDES Permit to that facility. IEPA informed ABRWTF on April 4, 2003 that the groundwater discharge could be accepted under their existing NPDES permit. Based on that, ABRWTF wrote to Solutia on May 7, 2003 indicating that they planned to issue a permit for this discharge prior to mid-July 2003.

  The local limits evaluation carried out by ABRWTF identified potential concerns with 4-chloroaniline and, to a lesser extent, with 2-chloroaniline. Based on these concerns, a work plan was submitted to IEPA to perform a toxicity study with the aim of revising the acute and chronic discharge limits for ABRWTF. That work plan was approved in January 2003 and the study commenced at that time. The study is progressing well and preliminary results were submitted to the IEPA on April 4, 2003 as part of a public comment on the draft ABRWTF NPDES permit. The final results of this study are expected by the end of June.

- Pipeline Construction

  Work was initiated in April to install the temporary 6 inch diameter discharge pipeline between the existing extraction well and a discharge manhole located immediately east of the levee. As part of this work, sections of an existing 30 inch diameter reinforced concrete pipe (RCP) that runs under the flood protection levee have been cleaned out. A 20 inch HDPE line was sliplined through the section of 30 inch RCP under the levee. This work was completed in mid-May and the temporary discharge pipeline was utilized during the Treatability Pilot Test. Currently, the pipeline is being disassembled.

  Bids were solicited from five contractors for the installation of the permanent discharge pipeline. Bids were received from three of the contractors and a contractor was selected on May 16, 2003. Installation work for the permanent discharge pipeline began on May 27, 2003 and is expected to be completed by the end of June.

- Extraction Well Installation
  The middle of the three extraction wells was installed in November 2002 and development of that well was completed in May 2003. Installation of the other two wells began on May 20, 2003. These wells will be constructed of 12 inch diameter casing, instead of the 10 inch diameter called for in the design, to allow for higher pumping volumes if the extraction system is started before the barrier wall is constructed. For the same reason, the well screens will be placed deeper than the planned 105 feet. Completion and development of those wells is expected by June 20, 2003.

Data Submittal

No data are submitted with this report.

Work scheduled for next reporting period

- Continue working with ABRWTF to expedite issuance of the final discharge permit.
- Select contractors for the installation of the instrumentation and control system, and the associated electrical supply system. Mobilize and construct these elements of the extraction system.
- Complete installation of permanent discharge pipeline. This includes pressure testing the pipeline and burying the section west of the flood control levee.
- Complete dismantlement of the pilot test discharge line and removal of the granular activated carbon columns.
- Remove liner from a 250,000 gallon modutank used for the temporary storage of some of the groundwater extracted during the pilot test and dispose of the liner at an appropriate disposal facility.
- Complete installation of remaining extraction wells.
- Install piezometers and monitoring wells identified in the approved extraction system design.
- Prepare responses to comments on the Pre-Final (95%) Remedial Design for submission by June 12, 2003.

Problems and Solutions

None

Submittal Schedule Status

See attached UAO schedule

Issues under review

None

Comments

None

Sauget Area 2 Site - Sauget, Illinois

October 3, 2002 UAO – Groundwater Operable Unit

SCHEDULE

Deliverable	Description	Due Date
Effective Date		**15-Nov-02**
Notice of Intent to Comply	On or before effective date	**15-Nov-02**
Designation of Project Coordinator and Contractors	15 days after effective date	**30-Nov-02**
Access	60 days after effective date	**14-Jan-03**
Notice of land ownership to appropriate governmental office	5 days after effective date	**20-Nov-02**
Notice of land ownership recording and indexing to U S EPA	15 days after effective date	**30-Nov-02**
RD/RA Workplan	45 days after effective date	**30-Dec-02**
Assurance of ability to complete work	30 days after effective date	**15-Dec-02**
Monthly Reports	To be submitted on or before the 10th date of each month following the effective date of the UAO	**10-Dec-02**
Construction Completion Report	Within 30 days of a successful final inspection	**TBD**